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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,348	07/26/2006	Fabien Divo	0604-1016	6635
<small>465</small> YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			<small>7590</small> EXAMINER STULTZ, JESSICA T	
			ART UNIT 2873	PAPER NUMBER
			MAIL DATE 07/28/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/587,348

Applicant(s)

DIVO ET AL.

Examiner

Jessica T. Stultz

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SI/100)
- Paper No(s)/Mail Date 7/26/06 10/26/06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

Claims 10, 14, 16, and 24 are objected to because of the following informalities: claim 10, line 2, "to claim 4, in which said beam separator" should be "to claim 5, in which said beam separator" since there is no previous mention of a beam separator in dependent claim 4; claim 14, line 2, "claim 9, in which said sign support" should be "claim 10, in which said sign support",

since there is no previous mention of a sign support in dependent claim 9; claim 16, line 2, "claim 9, in which said sign support" should be "claim 10, in which said sign support", since there is no previous mention of a sign support in dependent claim 9; and claim 24, line 1, "according to claim 21, in which said means for placing" should be "according to claim 22, in which said means for placing" since there is no previous mention of a "means for placing" in dependent claim 21. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7-9, 22-32, and 36-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoda et al US 2001/0055111, herein referred to as Yoda et al '111.

Regarding claim 1, Yoda et al '111 discloses a device for corrected acquisition of the shadow of an ophthalmic lens (Aⁿ1", Section 54, Figures 1-3) possessing one or more marks (Section 52, markings "3A" and "3B"), the device comprising: receiver means ("38") for receiving said ophthalmic lens; on either side of said receiver means, firstly lighting means (Sections 60-61, "31"/"58") for illuminating the ophthalmic lens (A) installed on said receiver means (Section 61, lens holder "37"/"57"), and secondly acquisition means (Sections 46 and 59, image screen "40" and image sensing unit "48", Figures 1-3) for acquiring the shadow of said ophthalmic lens illuminated by the lighting means (Sections 54 and 59); measurement means (Section 61, power measuring means "54") suitable for measuring the optical deflection power

exerted by the ophthalmic lens on at least one light ray and for delivering a signal representative of said deflection power (Section 61); and an electronic and computer system including geometrical correction calculation instructions for deducing from said measured deflection power a corrected shape for at least a portion of the shadow of the ophthalmic lens as perceived by the acquisition means (Sections 51-54, 61, and 66-68, wherein the images of shadows of the ophthalmic lenses are processed to make necessary corrections).

Regarding claim 7, Yoda et al '111 further discloses a device in which the acquisition means include a projection screen ("40") and an image acquisition system ("48") arranged to sense the image on said projection screen (Figures 1-3).

Regarding claim 8, Yoda et al '111 further disclose a device in which said receiver means, said lighting means, said acquisition means, and said measurement means are held stationary relative to one another (Shown in Figures 1-3, wherein even though screen "40" rotates, it is held in the same position relative to the other means).

Regarding claim 9, Yoda et al '111 further discloses a device having a single light path between said lighting means and said acquisition means (Shown in Figures 1-3, wherein a single light path exists between light source "31" and acquisition means "40").

Regarding claim 22, Yoda et al '111 further discloses a device including means for placing a handling peg at a location that is determined by calculation on the front face of said ophthalmic lens (Sections 73-75 and 179, wherein the lens is blocked to mount on a jig "200" based on the imaging processing calculations, which would inherently require a handling peg shown in Figures 5-6).

Regarding claim 23-24, Yoda et al '111 further discloses that the means for placing the handling peg are automatic means (Sections 10 and 73) or manually controlled manipulator means (Sections 136 and 183).

Regarding claim 25, Yoda et al '111 further discloses display means controlled by the electronic and computer system to display the at least partially corrected shape of the shadow perceived by the acquisition means (Section 183, wherein the image is displayed on a TV screen after processing).

Regarding claim 26, Yoda et al '111 further discloses a device in which the electronic and computer system controls the display means for displaying the outline of the lens without applying the geometrical correction calculation thereof (Sections 54, 59 and 183).

Regarding claim 27, Yoda et al '111 further discloses a device in which the electronic and computer system includes image recognition instructions suitable for recognizing the shadow of a mark of the ophthalmic lens as perceived by the acquisition means (Sections 52-55) and for applying said geometrical correction calculation thereto so as to deduce therefrom its corrected position in a known frame of reference corresponding substantially to the position that the shadow of said mark would present in said frame of reference in the absence of the lens possessing any deflection power (Sections 53-55 and 68).

Regarding claim 28, Yoda et al '11 further discloses a device in which the image recognition instructions are suitable for recognizing the shadow of a center and/or axis mark of the ophthalmic lens as perceived by the acquisition means (Section 52, Figures 17-19, wherein the center point is imaged).

Regarding claim 29, Yoda et al '11 further discloses a device in which the image recognition instructions are suitable for recognizing the shadow of a reference mark for far vision or for near vision on the ophthalmic lens as perceived by the acquisition means (Sections 42 and 44, Figures 17-19, wherein the near or far vision points are imaged).

Regarding claim 30, Yoda et al '11 discloses a method of correcting acquisition of the shadow of an ophthalmic lens (A'"1", Section 54, Figures 1-3) presenting one or more marks (Section 52, markings "3A" and "3B"), the method comprising the following steps: illuminating the lens by a light beam (Sections 60-61, "31"/"58"); measuring the optical deflection power exerted by the ophthalmic lens on at least one incident light ray of said beam (Section 61, power measuring means "54"); and from the measured deflection power, deducing by calculation a corrected shape for at least a portion of the shadow of said ophthalmic lens as illuminated by said light beam (Sections 51-54, 61, and 66-68, wherein the images of shadows of the ophthalmic lenses are processed to make necessary corrections).

Regarding claims 2 and 31, Yoda et al '111 further discloses that the corrected shape corresponds substantially to the shape that the shadow of said lens would present if said lens did not possess any deflection power (Sections 53-55 and 68).

Regarding claims 3 and 32, Yoda et al '111 further discloses wherein the measurement means ("54") are suitable for measuring the deflection power exerted by the ophthalmic lens on at least three light rays passing through the lens at three points that are not in alignment (Sections 41-44, Figures 17-19, wherein light beams pass through at least three points that are not in alignment).

Regarding claim 36, Yoda et al '111 further discloses a method, in which, for an ophthalmic lens of the multifocal type, the geometrical correction is applied to at least one reference mark for near vision or for far vision of the multifocal ophthalmic lens in order to obtain a corrected position for said mark (Sections 42 and 44, Figures 17-19, wherein the near or far vision points are imaged).

Regarding claim 37, Yoda et al '111 further discloses a method, in which the geometrical correction is applied to the shadow of at least one center and/or axis mark of the ophthalmic lens in order to obtain a corrected position for said shadow (Section 52, Figures 17-19, wherein the center point is imaged).

Regarding claim 38, Yoda et al '111 further discloses a method, in which, a virtual image (Section 183, wherein the image is displayed on a TV screen after processing) representative of the outline desired after the lens has been cut to shape is displayed on a display screen, and the position of said outline image is identified relative to the corrected position for the shadow of the centering mark on the lens (Sections 52-55).

Regarding claim 39, Yoda et al '111 further discloses a method including a step of displaying the corrected shape of the shadow on the lens on a display screen (Section 183, wherein the image is displayed on a TV screen after processing).

Regarding claim 40, Yoda et al '111 further discloses a method, in which, during said display step, the shadow of the outline of the lens is displayed on a display screen without applying the geometrical correction calculation thereto (Sections 54, 59 and 183).

Regarding claim 41, Yoda et al '111 further discloses a method including a step of recognizing the shadow of a mark on the ophthalmic lens and a step of applying the geometrical

correction calculation to said mark shadow so as to deduce therefrom its corrected position in a known frame of reference (Sections 52-55), said corrected position corresponding substantially to the position that the shadow of said mark would present in said frame of reference in the absence of the lens having any deflection power (Sections 53-55 and 68).

Regarding claim 42, Yoda et al '111 further discloses a method applied to automatically centering the lens, in which the recognized shadow is that of a center and/or axis mark of the ophthalmic lens (Section 52, Figures 17-19, wherein the center point is imaged).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6, 21, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoda et al '111, as applied to independent claims 1 and 30 above, in view of Devie et al US 2003/0112426, herein referred to as Devie et al '426.

Regarding claims 4, 21, 33, and 35 Yoda et al '111 discloses a device and method as shown above, but does not specifically disclose that the measurement means used to measure the deflection power of the ophthalmic lens is of the type proceeding by deflectometry or interferometry. In the same field of endeavor of measuring characteristics of ophthalmic lenses (Sections 2, 6, and 69), Devie et al '426 teaches of using a deflectometer or interferometer to measure the characteristics (Sections 17, 46, and 52). Therefore it would have been obvious to one having ordinary skill in the art to combine the teaching of Devie et al '426 with the device

and method of Yoda et al '111 for the purpose of determining the optical characteristics of the lens (specifically the wavefront characteristics of the lens in Devic et al '426) from light transmitted through the lens (Sections 3, 52, and 58).

Regarding claim 5, Yoda et al '111 and Devic et al '426 disclose and teach of the device as shown above and Yoda et al '111 further discloses that the deflectometry measurement means include at least one beam separator located between the lens receiver means and the acquisition means (Sections 51-52, wherein the beam separator comprises condenser lens "38" and imaging lens "39", Figures 1-3).

Regarding claim 6, Yoda et al '111 and Devic et al '426 disclose and teach of the device as shown above and Devic et al '426 further teaches that the deflectometry measurement means include acquisition means (Sections 17, 46, and 52, wherein the measurement means also acquires the information).

Regarding claim 34, Yoda et al '111 and Devic et al '426 disclose and teach of the method as shown above and Yoda et al '111 further discloses a method, in which, in order to measure the deflection power of the ophthalmic lens, the ophthalmic lens is illuminated and the shadow of the lens is sensed on acquisition means (Sections 46 and 59, image screen "40" and image sensing unit "48", Figures 1-3), a beam separator being disposed between said acquisition means and the lens (Sections 51-52, wherein the beam separator comprises condenser lens "38" and imaging lens "39", Figures 1-3).

Claims 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoda et al '111 in view of Devic et al '426, as applied to claims 4-6, 21, and 33-35 above, and further in view of Yanagi et al US 5,867,259, herein referred to as Yanagi et al '259.

Regarding claim 10, Yoda et al '111 and Devic et al '426 disclose and teach of the device as shown above, but do not specifically disclose that the beam separator supports at least one sign. In the same field of endeavor of measuring shadows on ophthalmic lenses (Abstract), Yanagi et al '259 teaches of a beam separator that is a support for at least one sign (Column 6, lines 16-55, wherein the beam separator is patterning plate "23", Figures 8-9) located between a receiver means ("104") and an acquisition means ("27"), and in which a geometrical correction relationship calculated by said electronic and computer system is a function of the deformed shadow of the sign perceived by the acquisition means (Column 6, lines 42-52). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Yanagi et al '259 with the device of Yoda et al '111 and Devic et al '426 for the purpose of observing optical characteristics of the lens based on hidden marks on the lenses (Column 2, line 50-Column 3, line 6).

Regarding claim 11, Yoda et al '111 and Devic et al '426 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the sign support ("23") is activatable and deactivatable (Column 8, lines 38-50, wherein the patterning plate is a liquid crystal shutter).

Regarding claim 12, Yoda et al '111 and Devic et al '426 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the sign support is a transparent active screen suitable for selectively displaying said opaque sign (Column 6, lines 34-41, opaque sign comprises light shielding portion "23B" and transparent portions "23C" and Column 8, lines 38-50).

Regarding claim 13, Yoda et al '111 and Devie et al '426 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the transparent screen is a liquid crystal screen (Column 8, lines 38-50, wherein the patterning plate is a liquid crystal shutter).

Regarding claim 14, Yoda et al '111 and Devie et al '426 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the sign support has a regular array of repeated patterns (Figure 9).

Regarding claim 15, Yoda et al '111 and Devie et al '426 and Yanagi et al '259 disclose and teach of the device as shown above, and Devie et al '426 further teaches of a sign support that comprises a Hartmann matrix (Section 58).

Regarding claims 16-17, Yoda et al '111 and Devie et al '426 and Yanagi et al '259 disclose and teach of the device as shown above, and Devie et al '426 further teaches wherein the sign support includes a geometrical figure (Figure 9) and it would have been obvious that the geometrical figure has a maximum outside dimension lying in the range 2 mm to 10 mm and covers an area lying in the range 3 mm^2 to 80 mm^2 for the purpose of providing shadows close to the lens markings since it has been held that where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, which is the case with the instant invention. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

Regarding claim 18, Yoda et al '111 and Devie et al '426 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the geometrical figure is of a shape different from a point or a cross, being suitable for being distinguished visually from a marking made on an ophthalmic lens (Figure 9).

Regarding claim 19, Yoda et al '111 and Devie et al '426 and Yanagi et al '259 disclose and teach of the device as shown above, and Yanagi et al '259 further teaches that the geometrical figure is a polygon (Figure 9).

Regarding claim 20, Yoda et al '111 and Devie et al '426 and Yanagi et al '259 disclose and teach of the device as shown above, and it would have been obvious to one having ordinary skill in the art at the time the invention was made for the geometrical figure for the purpose of differentiating from the lens markings of Yoda et al '111 (i.e. circles and lines) to be an oval since it has been held that that a mere change in the shape of a device would have been obvious absent persuasive evidence that the claimed configuration is significant, which is the case in the instant application, since there is no evidence that the shape of the geometrical figure is significant to the invention. *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gravell US 4,019,285, Albert-Garcia US 5,428,448, and Videcoq US 7,191,030 are cited as having some similar structure to the claimed invention since they disclose devices for measuring optical characteristics of lenses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica T. Stultz whose telephone number is (571) 272-2339. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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